

# Tennessee Emergency Communications Board

## Reimbursement Requirements For

### ECD/PSAP ESSENTIAL AND NECESSARY EQUIPMENT

*Effective April 20, 2006*

The Tennessee Emergency Communications Board ("TECB") was created "for the purpose of assisting emergency communications district boards of directors in the area of management, operations, and accountability, and establishing emergency communications for all citizens of the state."<sup>1</sup> The TECB is authorized to develop and implement a plan for providing statewide wireless enhanced 911 service, establish operating standards concerning acceptable uses of revenue for emergency communications districts and establish technical operating standards. The TECB is also authorized to act on the behalf of the state's districts to implement wireless enhanced 911 service pursuant to Docket 94-102 of the Federal Communications Commission (hereafter, "the FCC") and subsequent rulings and orders of the FCC, and other federal and state laws and regulations.

To further its statutory purpose, the TECB has the power and authority to:

Respond to requests from emergency communications districts, commercial mobile radio service (CMRS) providers or other parties and subject to availability of funds, review and approve requests for reimbursements for expenditures or payment of obligations incurred to implement, operate, maintain, or enhance statewide wireless enhanced 911 service in conformance with any rules or orders of the FCC, and other federal and state requirements that pertain to wireless enhanced 911 service.<sup>2</sup>

Pursuant to such authority, the TECB hereby establishes a reimbursement program with selected concomitant standards for essential and necessary equipment for ECDs/PSAPs. Compliance with the applicable standards is required to be eligible for cost recovery for these items. ECDs that receive, share, or contribute facilities, resources or income with other governmental entities will be required to certify that they have entered into a written interlocal agreement with such governmental entities memorializing their relationship. By accepting this funding, the ECD confirms that it is in compliance with, and will continue to comply with, all laws, rules, policies and orders applicable to the ECD and the provision of 911 or wireless enhanced 911 service.

This reimbursement is both retroactive and prospective, meaning that it is available both for purchases of approved, eligible equipment made on or after July 1, 2003 and for proposed or planned purchases of approved eligible equipment. To obtain reimbursement for ECD/PSAP essential and necessary equipment, choose the appropriate **Retroactive** or **Planned Purchase** reimbursement method identified below and follow instructions on the following pages applicable for that reimbursement method.

#### **Retroactive Reimbursement Method:**

If you, on behalf of your ECD, purchased or incurred costs to purchase eligible equipment on or after July 1, 2003 and before April 20, 2006, please follow the attached process entitled **Retroactive Reimbursement Procedures**.

#### **Planned Purchase Reimbursement Method:**

If you, on behalf of your ECD, do not or did not have a firm obligation to purchase eligible equipment, i.e., contract, encumbrance, bid, etc., as of April 20, 2006, please follow the attached process entitled **Planned Purchase Reimbursement Procedures**.

<sup>1</sup> Tenn. Code Ann. § 7-86-302(a).

<sup>2</sup> Tenn. Code Ann. § 7-86-306(a)(10).

# Tennessee Emergency Communications Board Reimbursement Guidelines For ECD/PSAP ESSENTIAL AND NECESSARY EQUIPMENT

*Effective April 20, 2006*

## **RETROACTIVE**

## REIMBURSEMENT PROCEDURES (Page 1)

The TECB will provide reimbursement funding of up to a maximum of \$150,000 for the purchase and installation of essential and necessary equipment that is purchased for Emergency Communications Districts (ECDs) operations on or after July 1, 2003. The equipment included in this process, identified by Board action at its regularly scheduled meeting of April 20, 2006, is divided into two tiers.

**Tier 1 Equipment:** Tier 1 equipment items are those that are essential to proper PSAP operation. See Attachments C, D, E, F and G for TECB established minimum requirements for controllers, GIS mapping systems, generators, UPS systems and logging recorders. Tier 1 equipment items deemed essential include the following items:

- Controller/telephone systems.
- GIS mapping systems.
- Back-up generators.
- TDD equipment.
- Uninterruptible power supply devices (UPS).
- Logging recorders.

**Tier 2 Equipment:** If an ECD certifies that it has all of the equipment identified in Tier 1 and the equipment is operational, (see Attachment H) then an ECD may request to purchase Tier 2 equipment which is necessary, but less critical than Tier 1 items. All items such must be approved by the TECB to be eligible for reimbursement. Tier 2 items include:

- Dispatch furniture.
- Radio equipment for districts that direct dispatch.
- Computer Aided Dispatch (CAD).
- Geographical Positioning System (GPS)/Addressing equipment.
- Other items which contribute to the operation, safety, maintenance or enhancement of the PSAP and are approved for reimbursement by the TECB.

This reimbursement amount is available for each ECD until totally disbursed to the ECD for retroactive or planned purchases, or until this program is terminated by TECB action, subject to the availability of funds. To be eligible for retroactive reimbursement, an ECD must provide the information in an acceptable manner that is detailed on the following pages.

1. **Written Request for Retroactive Reimbursement:** The ECD shall submit a written request to the TECB to obtain reimbursement for identified equipment which is appropriate to perform the function(s) intended and has been purchased and installed.<sup>1</sup> Requests may be:
  - Hand delivered at, or mailed to: TECB; 9<sup>th</sup> Floor, Davy Crockett Tower; 500 James Robertson Parkway; Nashville, TN 37243.
  - E-mailed to [TN.ECB@state.tn.us](mailto:TN.ECB@state.tn.us).
  - Faxed to (615) 253-2180.
2. **Explanation of Need:** Provide an explanation of why the purchased item is needed.
3. **Certification for Tier 2 purchase:** In the event you are requesting reimbursement for Tier 2 equipment, you must certify that you have all Tier 1 equipment and all Tier 1 equipment is fully operational (see Attachment H).
4. **Identify Location:** Provide the location of the equipment, so that it may be examined, if needed.
5. **Identify Equipment:** Provide a detailed description of the equipment sufficient to enable technical evaluation of the suitability and adequacy of the equipment to meet the specified need (include specifications).
6. **Standards Certification:** Provide documentation from the vendor or TECB staff that minimum standards established are met or exceeded for identified equipment.
  - Submit a certification from the vendor (Attachment B) that the equipment or system meets the standards set forth in this document in Attachments C, D, E, F and/or G.
  - If the original installation vendor does not currently service the system for which reimbursement is being requested, the ECD may request the Director of Technical Services of the TECB to make the certification, which will be scheduled and accomplished as time permits (TECB certification may delay reimbursement.)
7. **Cost:** Obtain a copy from vendor of any or all invoices that have been paid and submit the copy(s) with your request for reimbursement to identify and verify cost.
8. **Request Reimbursement:** After suitable and authorized equipment has become operational, the ECD may submit to TECB an original, completed "*Request For Reimbursement*" form (a copy of which is attached as Attachment A).

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<sup>1</sup> Please note the written request form requires certification by the ECD that (1) the cost reimbursement is correct, (2) the amount claimed was expended for wireless enhanced 911 service, and (3) the ECD has a written interlocal agreement with any other governmental entity that shares, jointly uses, provides or obtains any facilities, equipment, resources, or funding with the ECD. If you have unsuccessfully attempted to obtain such a written interlocal agreement, please contact the TECB General Counsel.

9. **Documentation Checklist:** The following documentation must be submitted with a request for reimbursement.

- ☐ an original request for reimbursement, with required certifications of correct and valid cost reimbursement, appropriateness for wireless enhanced 911 service, and existence of an interlocal agreement, if required (see Attachment B)
- ☐ justification of need for the equipment
- ☐ installed location of equipment
- ☐ detailed equipment specifications
- ☐ a copy of vendor invoice(s)
- ☐ vendor or TECB certification that required minimum standards are met, if required
- ☐ certification of Tier 1 full compliance, if Tier 2 equipment being purchased

10. **Inventory:** The ECD shall record the item as an asset and maintain identifying inventory records for audit purposes.

11. **Monitoring:** TECB staff and/or your auditor may monitor compliance with this authority and reimbursement procedure. Any discrepancies found may result in a request for repayment of inappropriately used funds, reductions in future funding to the extent of inappropriately used funds, or other action deemed authorized and appropriate. Monitoring efforts may include, but not be limited to:
- Checking equipment specifications.
  - Matching invoices with equipment.
  - Verifying location and use of equipment.

# Tennessee Emergency Communications Board Reimbursement Guidelines For ECD/PSAP ESSENTIAL AND NECESSARY EQUIPMENT *Effective April 20, 2006*

## **PLANNED PURCHASE**

REIMBURSEMENT PROCEDURES (Page 1)

The TECB will provide reimbursement funding of up to a maximum of \$150,000 for future purchases of essential and necessary equipment for Emergency Communications Districts (ECDs) operations. The equipment included in this process, identified by Board action at its regularly scheduled meeting of April 20, 2006, is divided into two tiers.

**Tier 1 Equipment:** Tier 1 equipment items are those that are essential to proper PSAP operation. See Attachments C, D, E, F and G for TECB established minimum requirements for controllers, GIS mapping systems, generators, UPS systems and logging recorders. Tier 1 equipment items deemed essential include the following items:

- Controller/telephone systems.
- GIS mapping systems.
- Back-up generators.
- TDD equipment.
- Uninterruptible power supply devices (UPS).
- Logging recorders.

**Tier 2 Equipment:** If an ECD certifies that it has all of the equipment identified in Tier 1 and the equipment is operational, (see Attachment H) then an ECD may request to purchase Tier 2 equipment which is necessary, but less critical than Tier 1 items. All items such must be approved by the TECB to be eligible for reimbursement. Tier 2 items include:

- Dispatch furniture.
- Radio equipment for districts that direct dispatch.
- Computer Aided Dispatch (CAD).
- Geographical Positioning System (GPS)/Addressing equipment.
- Other items which contribute to the operation, safety, maintenance or enhancement of the PSAP and are approved for reimbursement by the TECB.

This reimbursement amount is available for each ECD until totally disbursed to the ECD for retroactive or planned purchases, or until this program is terminated by TECB action, subject to the availability of funds. To be eligible for retroactive reimbursement, an ECD must provide the information in an acceptable manner that is detailed on the following pages.

1. **Written Request for Approval to Purchase:** The ECD shall submit a written request to the TECB to obtain approval to purchase and install equipment which is appropriate to perform the function(s) intended. Requests may be:
  - Hand delivered at, or mailed to: TECB; 9<sup>th</sup> Floor, Davy Crockett Tower; 500 James Robertson Parkway; Nashville, TN 37243.
  - E-mailed to [TN.ECB@state.tn.us](mailto:TN.ECB@state.tn.us).
  - Faxed to (615) 253-2180.

2. **Explanation of Need:** Provide an explanation of why the item being purchased is needed.
3. **Certification of Tier 2 purchase:** In the event you are requesting Tier 2 equipment, you must certify that you have all Tier 1 equipment and all Tier 1 equipment is fully operational (see Attachment H).
4. **Identify Location:** Provide the location where the equipment is to be installed.
5. **Identify Equipment:** Provide a detailed description of the equipment sufficient to enable technical evaluation of the suitability and adequacy of the equipment to meet the specified need (include specifications).
6. **Standards Certification:** Provide documentation that identified equipment meets or exceeds minimum standards established by TCEB. Submit a certification from the vendor (Attachment B) that the equipment or system meets the standards set forth in this document in Attachments C, D, E, F and/or G.
7. **Identify Cost:** Identify the projected costs by providing a copy of any bid, quote, or other cost identifying documents.
8. **Documentation Checklist for Request for Approval to Purchase:** The following documentation must be submitted with a request for approval.
  - ☐ justification of need for the equipment
  - ☐ detailed equipment specifications
  - ☐ vendor certification that TECB minimum standards are met, if required
  - ☐ proposed location where equipment will be installed
  - ☐ projected costs (bids or quotes)
  - ☐ certification of Tier 1 full compliance, if Tier 2 equipment being purchased
  - ☐ certification of written interlocal agreement (see Attachment I)
9. **Approval Notice:** TECB shall notify the ECD of conditional approval or rejection of request. Appeals of rejections may be presented to the TECB members at the next scheduled TECB meeting. Requests for appeal must be received no later than two (2) weeks prior to a TECB meeting to be considered during that meeting. Conditional approval may be based on the following criteria, and will be detailed in a Notice of Conditional Approval.
  - Adequate justification and need are demonstrated.
  - ECD is in compliance with operational mandates.

- 10. Request for Payment:** After approval is granted by TECB, an ECD may enter into a binding agreement to purchase the equipment and have it installed. To request reimbursement, the ECD shall:
- Submit to TECB an original, completed “*Request For Reimbursement*” form (a copy of which is attached as Attachment A).<sup>1</sup>
  - Obtain invoice(s) from vendor(s) and attach a copy of the invoice(s) to the request for reimbursement.
  - Provide detailed documents describing the equipment which can be used to verify that the equipment approved was actually purchased.
  - Provide a copy of vendor certification that equipment actually installed meets required minimum standards established by TECB (a copy of original certification provided in the approval process is acceptable if the equipment is the same as originally approved).
  - If Tier 2 equipment is being purchased, submit certification that ECD is in full compliance with Tier 1 equipment requirements (see Attachment F).
- 11. Documentation Checklist for Request for Reimbursement:** the following documentation must be submitted with a request for reimbursement.
- ☐ actual location where the equipment is installed
  - ☐ detailed equipment specifications
  - ☐ vendor certification that minimum standards are met, if required
  - ☐ copy of invoice(s)
  - ☐ an original request for reimbursement, with required certifications of correct and valid cost reimbursement, appropriateness for wireless enhanced 911 service, and existence of an interlocal agreement, if required (see Attachment B)
  - ☐ certification of Tier 1 full compliance, if Tier 2 equipment being purchased
- 12. Inventory:** The ECD shall record the item as an asset and maintain identifying inventory records for audit purposes.
- 13. Monitoring:** TECB staff or your auditor may monitor compliance with this authority and reimbursement procedure. Any discrepancies found may result in a request for repayment of inappropriately used funds, reductions in future funding to the extent of inappropriately used funds, or other action deemed authorized and appropriate. Monitoring efforts may include, but not be limited to:
- Checking equipment specifications
  - Matching invoices with equipment
  - Verifying location and use of equipment

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<sup>1</sup> Please note the written request form requires certification by the ECD that (1) the cost reimbursement is correct, (2) the amount claimed was expended for wireless enhanced 911 service, and (3) the ECD has a written interlocal agreement with any other governmental entity that shares, jointly uses, provides or obtains any facilities, equipment, resources, or funding with the ECD. If you have unsuccessfully attempted to obtain such a written interlocal agreement, please contact the TECB General Counsel.

**STATE OF TENNESSEE**  
**TENNESSEE EMERGENCY COMMUNICATIONS BOARD**  
**DEPARTMENT OF COMMERCE AND INSURANCE**  
500 JAMES ROBERTSON PARKWAY, NINTH FLOOR  
NASHVILLE, TENNESSEE 37243  
615-253-2164/FAX: 615-401-7642

**REQUEST FOR REIMBURSEMENT**  
**OF NON-RECURRING COSTS FOR PURCHASE OF THE FOLLOWING**  
**ECD/PSAP Essential and Necessary Equipment**

**District:**

**Contact:**

**Address:**

**Brief Description of Equipment Purchased:**


As an authorized representative of the Emergency Communications District named above, the undersigned submits this request for reimbursement costs for essential or necessary equipment.

Description	TIER 1	TIER 2	Total Request
Reimbursement Request	\$	\$	\$

**CERTIFICATION**

I hereby certify that this request for cost reimbursement, which is submitted to the Tennessee Emergency Communications Board pursuant to Tenn. Code Ann. § 7-86-306(a)(10), is correct and valid. I further certify that the amount claimed was expended to implement, operate, maintain or enhance statewide wireless enhanced 911 service in conformance with all applicable orders and rules of the Federal Communications Commission and other federal and state requirements that pertain to wireless enhanced 911 service.

I further certify that if the ECD shares, jointly uses, contributes, or obtains any facilities, equipment, resources or income of any kind with another governmental entity, then an interlocal agreement memorializing the terms of joint operation as contemplated by Tenn. Code Ann. § 7-86-105(b)(6) exists between the parties and is available for review.

\_\_\_\_\_  
Signature of District Agent

\_\_\_\_\_  
Date



## Attachment B

### **VENDOR OR ECB CERTIFICATION**

I hereby certify that the equipment on the attached schedule of equipment and associated invoice meets the minimum standards set forth in Attachment \_\_\_\_ to the reimbursement requirements for essential and necessary equipment as designated by the Tennessee Emergency Communications Board.

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Vendor or ECB Representative

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Date

## Attachment C

### Minimum Requirements – Controller

Controller equipment or system must meet the standards set forth in the NENA Recommended Generic Standards for E-911 PSAP Equipment, dated March 2001

Website: [http://nena.org/media/files/NENA\\_04-001.pdf](http://nena.org/media/files/NENA_04-001.pdf)

## **Minimum Requirements - GIS Mapping**

### ***Software Features***

#### ***911 Functionality***

- Extracts land line or wireless call data from ALI data burst and pinpoints call location on screen without user intervention. Land line calls are pinpointed by geocoding the address against street centerline or point address data. Wireless calls are pinpointed using the X, Y coordinate data from the ALI.
- Geocoding functions should be able to handle missing addresses and alternate street names.
- Original ALI data can be viewed for each call.
- Active calls are logged on-screen; user can zoom to previous call location and retrieve data while it is active.
- General location information is determined for each call – i.e. closest intersection, closest landmark. For wireless calls, a closest address will be determined using reverse geocoding.
- Latitude/longitude coordinates can be determined for any location on the map. Must be able to manually pull up a latitude/longitude and or street address.

#### ***Basic Map Functionality***

- Can use as many map layers as is practical without cluttering the screen. User can turn map layers on and off as desired.
- User can interactively pan around the map and zoom in and out as desired.
- Features in map layers can be identified.
- Distance can be measured.
- Map screen can be printed.
- Software can display and use all data products developed through the State of Tennessee Base Mapping program. This includes raster data (aerial photography) as well as vector data sets (parcels, roads, water features).

### ***Data Requirements***

#### ***Minimum Map Layers***

- Street centerlines with complete address attributes
- Point landmarks – churches, schools, hospitals, cemeteries, government buildings
- Area landmarks – parks, airports, military bases
- Fire Hydrants and Stations
- Water features
- Administrative boundaries – city, county, state
- ESN boundaries
- USGS Digital Ortho photos (available for entire state – photography from 1997/98)

#### ***Maintenance and Update***

To qualify for reimbursement, a plan for updating map layers must be submitted. This plan may include:

- Work flow summary of how addresses are assigned & worked into an update process
- Method of update: in-house, contracted, or purchased from data vendor
- Personnel responsible for update
- Minimum update cycle = quarterly

## Attachment E

### Minimum Requirements – Generators

- Liquid-cooled engine
- AC alternator
- Weather-protective enclosure
- Vibration shock mounts
- Gauges for battery voltmeter, water temperature, oil pressure, and run-time
- 3-position mode switch (auto-off-manual)
- Extra quiet muffler and rain cap equipped exhaust pipe
- Over current warning and shutdown
- Over and under voltage/frequency shutdown
- Over-speed shutdown
- Low oil pressure warning and shutdown
- High/Low coolant temperature warning and shutdown
- High/low/weak battery voltage warning
- Fail to start shutdown
- Fail to crank shutdown
- Redundant start disconnect
- Optional remote display/control panel
- Auxiliary relay for dry contacts
- Emergency stop button
- Sized to power mission critical dispatch center systems including E911 controller(s), telephones/telephone system, radio console(s), logging and instant recall recorders, mapping, TTY/TDD, and computer-aided dispatch
- Two-year minimum on-site warranty (parts & labor)

## Attachment F

### Minimum Requirements – Uninterruptible Power Supply (UPS)

(Note: This is sometimes referred to as a “back room” system)

- Sized to power mission critical dispatch center systems including E911 controller(s), telephones/telephone system, radio console(s), logging and instant recall recorders, mapping, TTY/TDD, and computer-aided dispatch for a minimum of 1 hour
- Requires connectivity to dispatch floor receptacles as well as to the generator/commercial power via transfer switch
- Automatic UPS bypass on overload or UPS failure
- Sealed lead-acid batteries
- Internal maintenance bypass
- Top and bottom cable entry
- Two year on-site warranty (parts and labor)
- Meets UL and CUL standards
- User friendly control/monitoring display
- Input for external emergency power off (EPO)

### Minimum Requirements – Logging Recorders

- Utilize an open architecture that is a non-proprietary PC platform
- Be equipped with a sufficient number of channels to support existing requirements plus 50% growth
- Have inboard storage capacity to provide for 24 hours of storage of all channels recorded plus 50% spare capacity
- Have recording inputs for standard analog, ISDN basic or primary rate interface, T-1, and include interconnectivity with radio (conventional and trunked), telephone, microphone, headset, and ANI/ALI data from E911 controller via appropriate data connection
- Utilize DVD-RAM Optical Disks for archiving
- Utilize modular architecture for system expansion and upgrades
- Be equipped with mirrored storage for redundancy and reliability
- Be equipped with hot-swappable power supplies and fans
- Capable of searching by radio channel, talk group, trunk, telecommunicator position, time of day, caller data from ALI display (if utilized) as a minimum
- Provide self test, error log, and other system diagnostics
- Have input for external time sync (RS-485, RS-232, and IRIG-B)

**ECD TIER 1 CERTIFICATION**

I hereby certify that \_\_\_\_\_  
Emergency Communications District has all necessary equipment fully operational that  
is required for Tier 1 (essential equipment) and intends to purchase and obtain  
reimbursement for equipment items from Tier 2 (necessary equipment).

\_\_\_\_\_  
Director

\_\_\_\_\_  
Date

**INTERLOCAL AGREEMENT CERTIFICATION**

I hereby certify that if the \_\_\_\_\_  
Emergency Communications District shares, jointly uses, contributes, or obtains any  
facilities, equipment, resources or income of any kind with another governmental entity,  
then an interlocal agreement memorializing the terms of joint operation as contemplated  
by Tenn. Code Ann. § 7-86-105(b)(6) exists between the parties and is available for  
review.

\_\_\_\_\_  
Director

\_\_\_\_\_  
Date